Review: [Untitled]

Reviewed Work(s):

*Prosocial Behavior: Theory and Research*, by Daniel Bar-Tal

Mary Jane West Eberhard


Stable URL:

http://links.jstor.org/sici?sici=0033-5770%28197709%2952%3A3%3C329%3APBTAR%3E2.0.CO%3B2-G

*The Quarterly Review of Biology* is currently published by The University of Chicago Press.

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at http://www.jstor.org/about/terms.html. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at http://www.jstor.org/journals/ucpress.html.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

The JSTOR Archive is a trusted digital repository providing for long-term preservation and access to leading academic journals and scholarly literature from around the world. The Archive is supported by libraries, scholarly societies, publishers, and foundations. It is an initiative of JSTOR, a not-for-profit organization with a mission to help the scholarly community take advantage of advances in technology. For more information regarding JSTOR, please contact support@jstor.org.
manipulation” (in the general sense of Trivers) may play a role, or that there is a possible role for selfish behavior (the reverse of altruism). For example: Sahlins argues that if kin-selection were operative, human groups should not exchange members, since it would benefit an individual to be near his or her own relatives. While true in its simplest form, this contention fails to address the issue of possible losses (in terms of fitness) associated with inbreeding. To argue as a sociobiologist, perhaps there is some optimal balance between loss in fitness due to inbreeding and gains from helping relatives. Actually the problem is not restricted to humans. A sister who mates with a brother passes “her” genes via herself and her sib. If she causes the brother no loss in fitness (through access to other females), all would seem to gain in the action. However, the widespread occurrence of out-breeding in nature argues that inbreeding depression is an important selective force countering incest (I thank J. Maynard Smith for this thought). By taking a very simple view of kin-selection, Sahlins reaches a rather final conclusion. I suggest that this conclusion is not justified by his analysis.

A critique of his chapter on natural selection must focus on one major facet. He criticizes natural selection as a viewpoint, but he ignores the wealth of theory and data which uphold its usefulness — Lack’s theory of clutch size, Fisher’s sex-ratio theory, the Orians-Verner model for poligamy — many more could be cited. It is as if Sahlins elected to ignore most of Wilson’s book and all of the evidence bearing upon natural selection applied to organisms. If biologists may be rightfully accused of claiming too much for sociobiology as applied to humans, Sahlins is clearly open to the criticism of misunderstanding how sociobiology applies to biology.

On the whole, I found this book unconvincing. As stated in the author’s introduction, the book was written in a hurry because the author feared that sociobiology would soon disappear as a science, to live on as some form of pop culture. Given the amount of work now under way in various laboratories, these predictions seem rather unlikely. Nevertheless, I hope Sahlins’ book is widely read, since it points out the complexity of human social structure which indeed requires explanation. Perhaps the most important contribution the book makes is in the area of methodology. Quotations from Jean-Paul Sartre, Thomas Hobbes, or Karl Marx (in Chapters 1 and 4) will not settle the question of how useful sociobiology is as a viewpoint for analyzing human behavior. Sociobiology, in its application to humans, will succeed or fail depending upon the insights it provides: most of the work is yet to be done.

Eric L. Charnov, Biology, University of Utah

Prosocial Behavior; Theory and Research.

This book could be subtitled, “Psychology for Sociobiologists.” It deals with “prosocial” behavior (reciprocity and altruism) in humans, and seems a diligent summary of these topics as treated in social psychology, not venturing outside that field except to cite a few articles in journals of sociology. Sociobiologists will find this book useful as a starting point for cross-disciplinary synthesis, and as a reminder that man is by far the most studied social organism. This is the largest available monograph on the central themes of sociobiological thought available for any single species. Costs and benefits of prosocial behavior are elaborately analyzed, but kinship, another of the cornerstones of sociobiological theory, is scarcely mentioned and evidently plays a very minor role in psychological explanations of altruism. It is to be hoped that future research will show whether this striking difference in approach reflects real differences in the nature of human vs. non-human sociality, or, as seems more likely, differences in the conceptual traditions of the two fields, which have developed in nearly perfect isolation from each other. Bar-Tal’s extensive bibliography (more than 250 entries) has only three references in common with the more than 2500 references of E. O. Wilson’s Sociobiology.

Mary Jane West Eberhard, Biologia, Universidad del Valle, Cali, Colombia, and Smithsonian Tropical Research Institute, Balboa, Canal Zone


The details of the way the native of high altitudes is adapted to hypoxic stress as compared to the lowlander transposed to high altitudes, has challenged biologists since Monge’s pioneering studies of the highlander Peruvian Indians. In the hope that the answer might lie in a comprehensive study of a somewhat isolated population that has lived for generations at high altitude, P. T. Baker began, in 1964, a four-year project which was reformulated in 1967 and 1968 under the Human Adaptability Project of the International Biological Programme. The population selected was the Quechua Indian and mestizo natives of the district of Nuñoa, Department of Puno, in southern Peru; the town of Nuñoa is 4050 m above sea level. Data from lowland populations were used for comparative purposes.

The results of the Nuñoa project are presented in this book. It consists of 20 contributions by 17 specialists in ecology, social and political structure, child care, genetics, environmental health, vital statistics, nutrition, hematology, and physiology. Some of this material has already been published elsewhere. The book is well illustrated with graphs and tables.